

CLAIMS

1. A communications service platform comprising:

a multiplicity of loosely coupled subsystems, each of the subsystems including

5 respective service processing resources; and

a respective resource locator, each resource locator including means for communicating to others of the resource locators data indicating the subsystem identity and data indicating the availability of resources in the respective subsystem, and means for receiving identity data and resource availability data for resource locators in others of the subsystems.

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2. A platform according to claim 1, in which the resource locators are arranged to communicate directly with each other by peer-to-peer signalling.

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~~3. A platform according to claim 1 or 2, further comprising a resource broker and in which at least some communication between the resource locators is mediated by the resource broker.~~

20 4. A platform according to claim 3, in which the resource broker is located in one of the said subsystems.

5 5. A platform according to claim 3 or 4, in which the resource broker includes:

~~a data interface arranged to receive capability~~

25 data and interface data from respective resource locators, and

~~a registry arranged to store the said capability data and interface data~~

~~6. A platform according to any one of claims 3 to 5, in which a resource locator in a subsystem is arranged initially to read capability data and interface data for another subsystem from the resource broker, and subsequently communicates further data directly with the other subsystem using the interface of the subsystem identified in the said interface data.~~

Subj: 10

Subj: 12

sub1
obj

~~7. A platform according to any one of claims 3 to 6, in which at least one of the subsystems is arranged to communicate directly with a selected other subsystem via a respective specific data interface and in which others of the subsystems are arranged to communicate with a selected other subsystem via an object bus.~~

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8. A platform according to claim 7 in which the or each said subsystem arranged to communicate directly via a respective specific data interface is arranged, on initialisation of the said subsystem, to read data for the selected other subsystem from the resource broker, and in response to calls subsequent to the initialisation 10 of the subsystem, communicates directly with the selected other subsystem without reference to the resource broker.

~~9. A platform according to claim 7 or 8, in which the said subsystems arranged to communicate via an object bus are arranged, in response to each new call, to read 15 resource data from the resource broker.~~

10. A communications system comprising:
a plurality of call processing subsystems;
a network interconnecting the plurality of call processing subsystems;
20 a resource broker connected to the network, the resource broker including
a data interface arranged to receive capability
data and interface data from respective call processing subsystems, and
a registry arranged to store the said capability data and interface
data.

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11. A communications system according to claim 10, further comprising an object bus interconnecting at least some of the call processing subsystems.

12. A communications system according to claim 11, in which communication 30 paths between others of the subsystems bypass the object bus.

13. A computing platform comprising a multiplicity of loosely coupled computing subsystems, each of the said subsystems including respective data processing resources and a respective resource locator arranged (to advertise its identity and

the loading of the respective resources and to receive resource signalling from others of the resource locators .

14. A method of operating a communications system, the system including a
5 multiplicity of processing subsystems and a network interconnecting the
multiplicity of subsystems, the method comprising;

10 a) communicating from a resource locator in a respective one of the
multiplicity of subsystems to resource locators in others of the multiplicity of
subsystems data indicating the identity of the said one subsystem and the
availability of resources in the said one subsystem

15 b) repeating step (a) for each other of the multiplicity of subsystems:
c) when one of the multiplicity of subsystems, in the course of processing
a call, requires resources not present locally in the said subsystem:
i) identifying from the said data communicated to the resource
locator of the said one subsystem another subsystem having the said resources;
ii) accessing the said subsystem via the network.

20 15. A method according to claim 14, in which, for each of the multiplicity of
subsystems, step (a) is repeated regularly.

16. A method according to claim 15, in which the period of repetition for step (a)
is small compared to the mean duration of a call processed by the communications
system.

25 ~~17. A method according to any one of claims 14 to 16, in which, for at least one
of the multiplicity of subsystems, step (a) is repeated in response to an event in
the respective subsystem.~~

18. A method according to claim 17, in which the said event is a change in
30 resource availability in the subsystem exceeding a predetermined threshold.

~~19. A method according to any one of the preceding claims in which the
communication of resource data between subsystems is mediated by a resource
broker.~~

20. A method according to claim 19, in which data is communicated between at least some of the subsystems and the resource broker via an object bus.
- 5 21. A method according to claim 20 in which data is communicated between others of the subsystems directly, bypassing the object bus.